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	Application No.	Applicant(s)	
	09/886,165	CUMMINGS ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Ling-Siu Choi	1713	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 09/15/2005.	(OR REMAINS) CLOSED in or other appropriate commits (GHTS). This application is	n this application. If not included unication will be mailed in due course	
2. The allowed claim(s) is/are 1-13, 26-32, and 36-37.			
 Acknowledgment is made of a claim for foreign priority unally all bloome* claim for foreign priority unally all bloome* claim for foreign priority unall all bloome* claim for foreign priority unall all bloome so fithe: Certified copies of the priority documents have all copies of the certified copies of the priority documents have all copies of the certified copies of the priority documents have all copies of the priority documents. Certified copies not received:	been received. been received in Application	on No	om the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirement	ents
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			OF
 CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers hereto or 2) ito Paper No./Mail Date ncluding changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the deposition of the property o	on's Patent Drawing Review Amendment / Comment on the header according to 37 CF Sit of BIOLOGICAL MAT	in the Office action of the drawings in the front (not the back) R 1.121(d). ERIAL must be submitted. Note the	
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/02 Paper No./Mail Date	5. ☐ Notice of In 6. ☐ Interview S Paper No. 8), 7. ☒ Examiner's	formal Patent Application (PTO-152) ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance	

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DETAILED ACTION

1. This Office Action is in response to the Amendment after Final filed September 15, 2005. Claims 14-25 and 33-35 were canceled and claims 1-13, 26-32, and 36-37 are now pending.

Allowable Subject Matter

- 2. Claims 1-13, 26-32, and 36-37 are allowed.
- The following is an examiner's statement of reasons for allowance:
 The present claims are allowable over the closest references: Austin et al. (WO 01/37958
 A2), Austin et al. (US 5,837,115), and Regnier et al. (US 6,596,144 B1).

1	a fluid flow channel	fluid inlet and outlet means	
		a plurality of insulating structures disposed therein	
2	an electrode	in electric communication with each fluid inlet and outlet means,	
		wherein the electrodes are positioned to generate a spatially non-	
		uniform electric field across the plurality of insulating structures	
		and wherein the spatially non-uniform electric field exerts a	
		dielectrophoretic force on a sample undergoing separation	
3	power supply means	connected to the electrode	

(summary of claim 1)

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Austin et al. (WO 01/37958 A2) disclose a microchip for polarized particles, comprising constrictions of insulating material for dielectrophoresis powered by an alternating current or direct current signal generator and a hot source that can be heated to specific temperatures (abstract). However, Austin et al. do not teach or fairly suggest the claimed apparatus, especially having the electroosmotic flow not suppressed.

Austin et al. (US 5,837,115) disclose a sorting apparatus composed of a substrate having a receptacle, wherein electrodes are positioned within the receptacle to generate an electric field in the fluid medium in the receptacle to induce the migration of the microstructures and the obstacles of the array of obstacles is in various shapes such as round posts or rectangular bunkers, which are separated by a distance in a range of from about 0.01 microns to about 50.0 microns (abstract; claims 1 and 9). However, Austin et al. do not teach or fairly suggest the claimed apparatus, especially comprising dielectrophoretic separation process and having the electroosmotic flow not suppressed.

Regnier et al. disclose a separation column which includes multiple collocated monolith support structures and interconnected channels defined by the support structures, wherein the mobile phase is transported through the separation system by electrophoresis and electrochromatography (abstract; col. 1, lines 24-44). However, Regnier et al. do not teach or fairly suggest the claimed apparatus, especially comprising dielectrophoretic separation process and having the electroosmotic flow not suppressed.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the

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payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.

Licela'

LING-**SUI** CHOI PRIM**ARY EXAMINER**

October 5, 2005